A pedal powered approach to designing a strategic cycling network in smaller cities and towns

Caitríona Corr 8/9/2023



Partnership Approach
Co-funded Research project

SCHOOL OF HEALTH BEHAVIOUR RESEARCH

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IRISH RESEARCH COUNCIL
An Chomhairle um Thaighde in Éirinn

Kilkenny County Council
Comhairle Chontae Chill Chainnigh



Existing collaborations

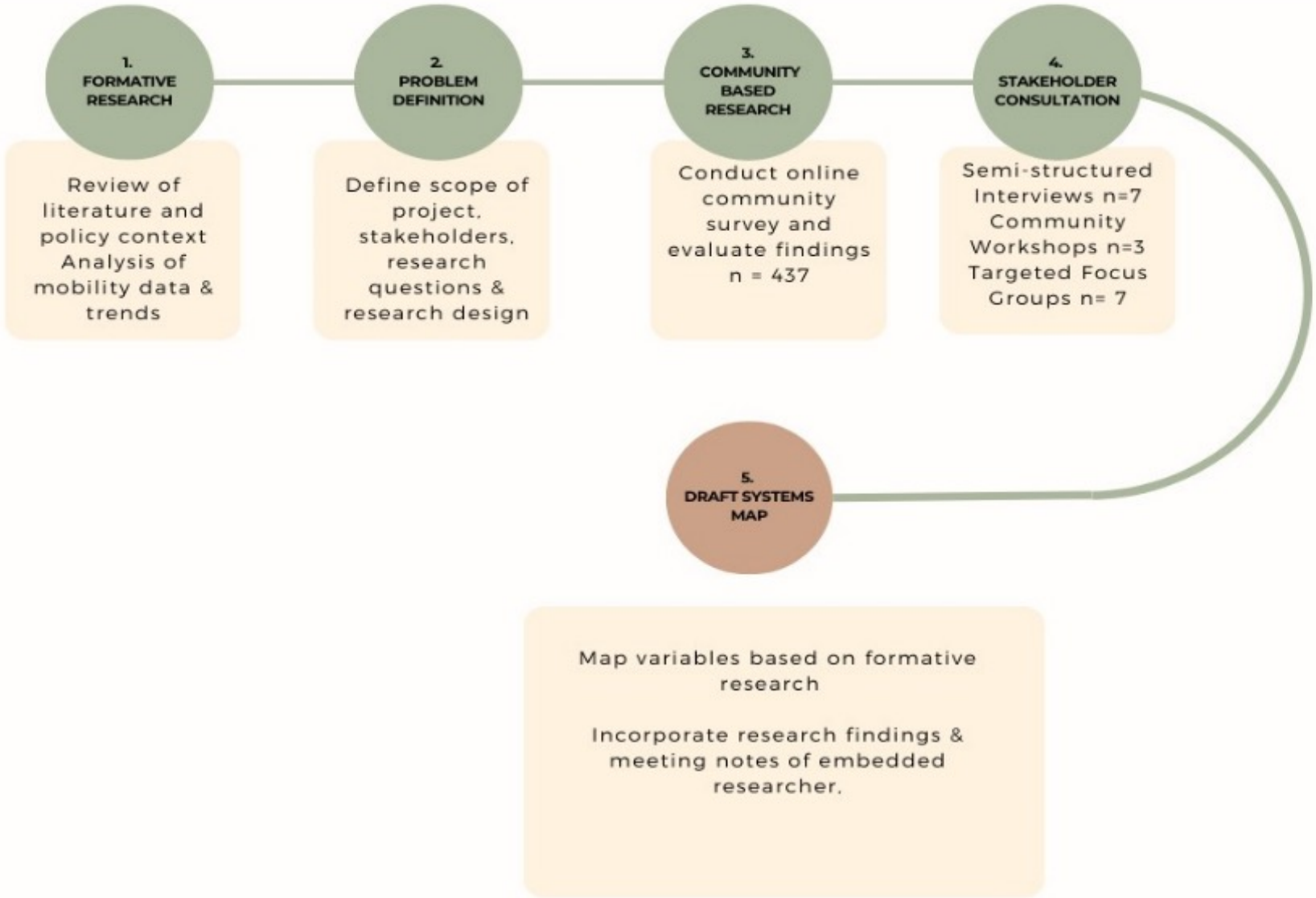
- Smarter Travel Towns - Kilkenny County Council and WIT (2012)
- European Co-operation Project led by the Local Development Company / Local Innovators/ with Local Authority
- Siloed approach

A Systems Approach

- Physical Activity through Sustainable Transport Approaches (PASTA) consortium[1] reviewed 26 published frameworks and combined behavioural concepts, structural features and a large number of determinants in a single framework.
- Large research projects may still merit a study specific framework
- Adaptation to local contexts, the local socio-ecological system, innovation and learning
- This action research adopted a systems approach with broad stakeholder engagement to encourage vision-orientated and community-based decision making towards a framework specific to the context

1. Götschi T, de Nazelle A, Brand C, Gerike R, on behalf of the PASTA Consortium, Alasya B, Avila-Palencia I, et al. Towards a comprehensive conceptual framework of active travel behavior: a review and synthesis of published frameworks. *Curr Environ Health Rep*. (2017) 4(3):286–95. doi: 10.1007/s40572-017-0149-9

A SYSTEMS APPROACH TO ACCELERATING A SHIFT TO SUSTAINABLE TRANSPORT IN IRISH TOWNS



"I think Kilkenny has a really great opportunity for a regional town to turn the narrative around, that's a narrative that's embedded in lot of wider challenges around the future of our town centres."

"The single greatest challenge is fear, I think people have a fear of change, what we're looking at is a major cultural shift, it's not tweaking around the edges anymore, what has to happen for a place like Kilkenny has to be quite radical, but it has to be done in a way that's participative and that people are brought on board."

"The drive is there to do it, so I think if the willingness is there to do it amongst all actors, there's a great opportunity"

"if you create wow, well, you've made a friend, you're already winning. So if you do the same with your town, you're winning with tourists and if you can make your residents say wow? That's when they take pride and all sorts of things"

"You can't impose systems on people or on business who are going to be struggling even more now, that they don't want, so I think it's really important that we do that and we take on board the views of everyone who has a stake hold in the town"

I feel like I'm a thorn in the side…

"we had city engineers who wanted to make progress on it, we had planners in the planning section who wanted to make progress on cycle infrastructure. I'm not sure if we had the necessary skill set in the Local Authority to see that from a hard road engineering perspective to a cyclists perspective and again there lies the challenge"



FRUSTRATION



LACK OF DIALOGUE



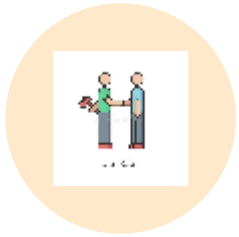
NO COMMUNICATION CHANNELS



LITTLE UNDERSTANDING OF EACH OTHERS' ROLES



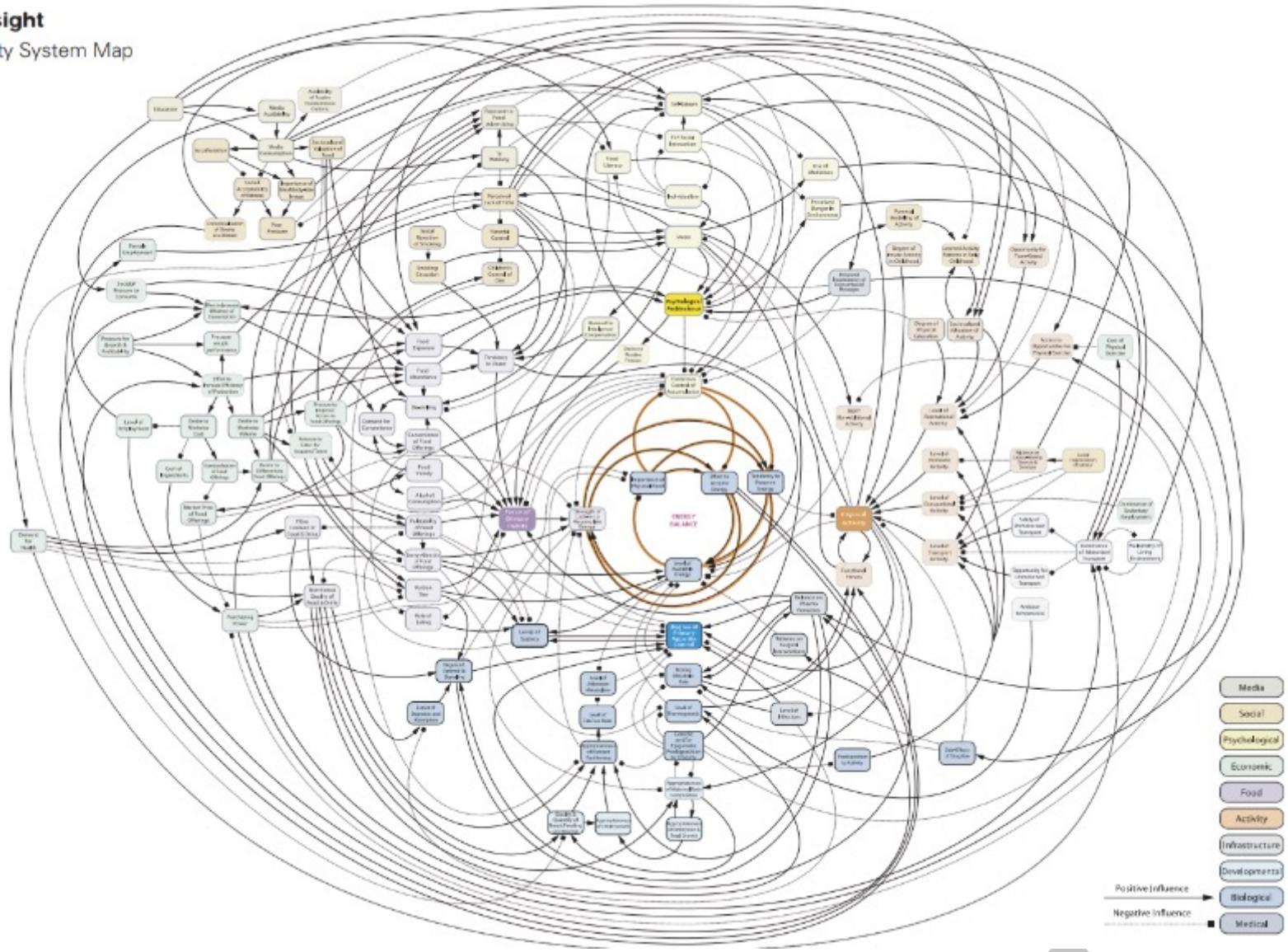
LITTLE UNDERSTANDING OF THE DIFFICULTIES FACED



LACK OF TRUST

Foresight

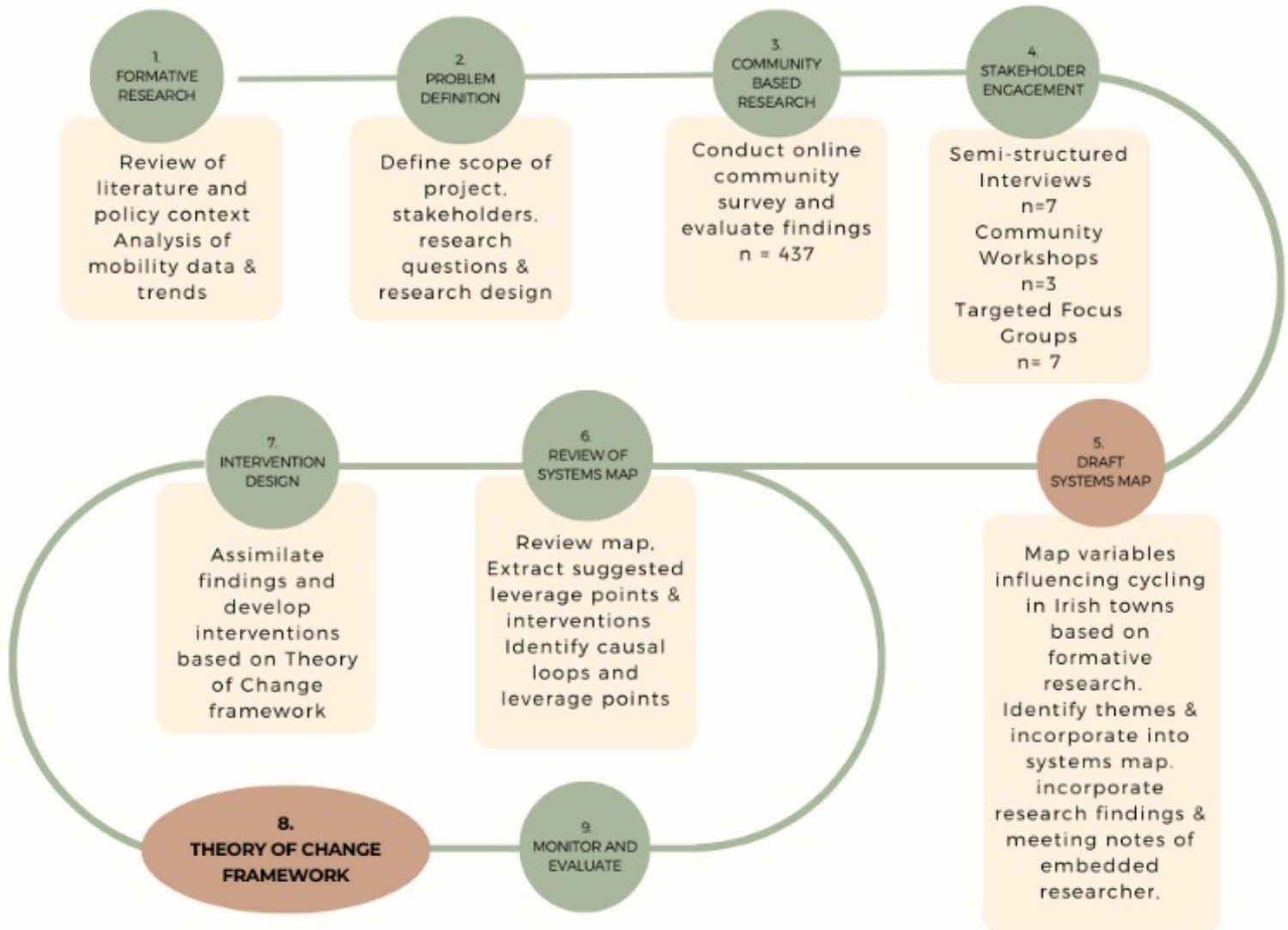
Obesity System Map



Cycling in Irish Towns



A SYSTEMS APPROACH TO THE DEVELOPMENT OF A CYCLING CULTURE IN IRISH TOWNS



Systems Thinking

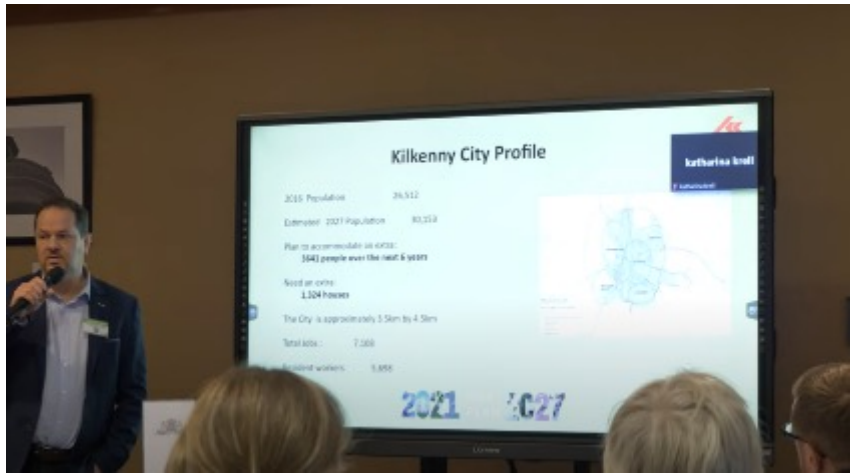


“systems thinking provides a framework to help examine the factors involved in a problem, the relations between these factors and changes over time”. It has been widely applied to problems arising in complex social, ecological and more recently public health systems.

Rutter H, Cavill N, Bauman A, Bull F. Systems approaches to global and national physical activity plans. Bull W H O. (2019) 97(2):162–5. doi: 10.2471/BLT. 18.220533

A systems approach allows for dialogue between stakeholders, enabling them to learn how to change their patterns of decision making and emphasise project-based experimentation and social learning

Rydin Y, Bleahu A, Davies M, Davila JD, Friel S, di Grandis G, et al. Shaping cities for health: the complexities of planning urban environments in the 21st century. Lancet. (2012) 379(Special Issue):2079–108. doi: 10.1016/S0140-6736(12)60435-8.


Kilkenny City Profile
katharina kroll
2021







- School Zones
- Cycle Champions in schools
- Bike share schemes
- Social Media Campaigns
- Route Suggestions
- Park and Strides/Rides
- Placemaking
- Permeability
- Upcycling Bikes
- Participation Events






LANIGANS
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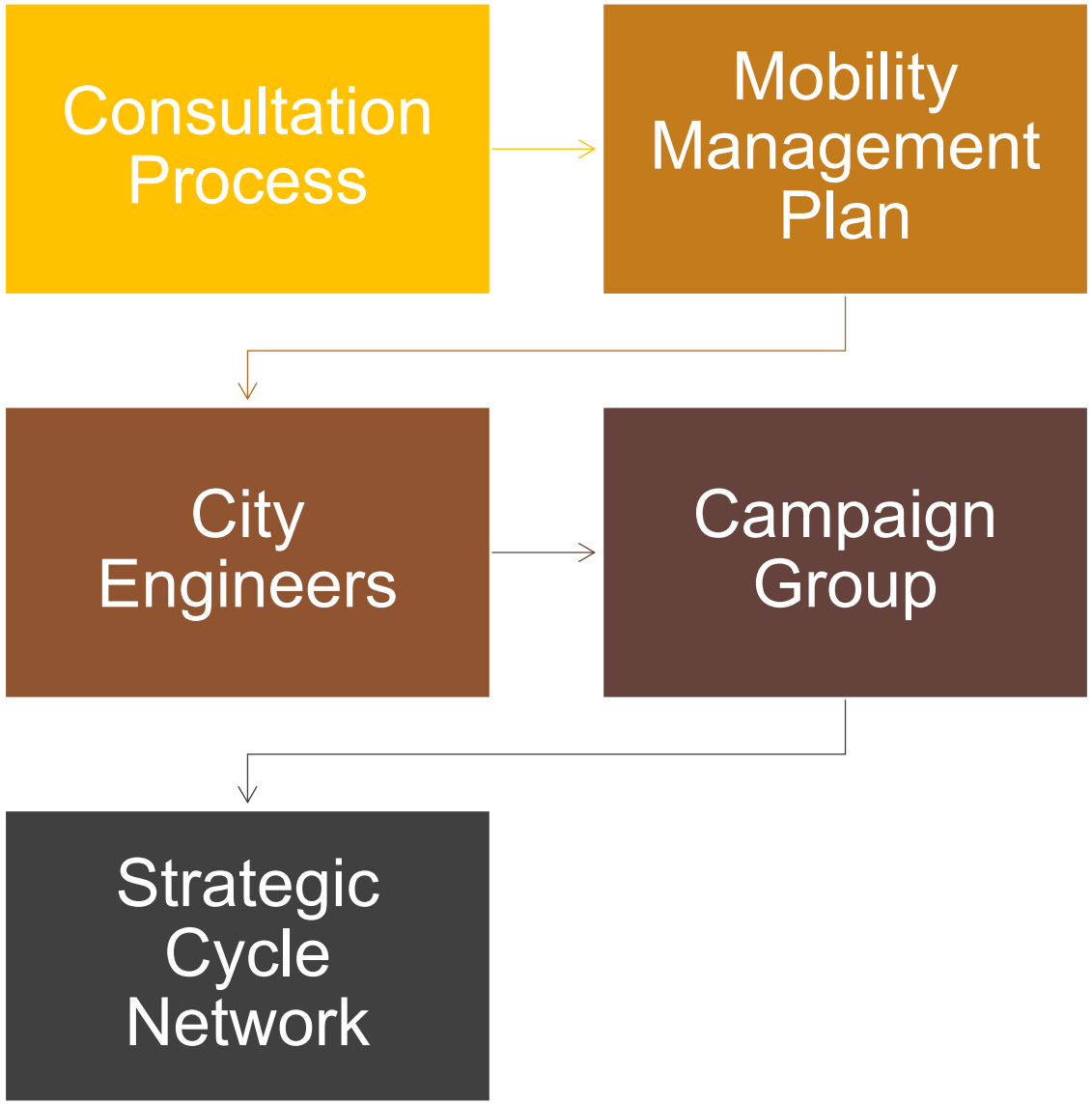
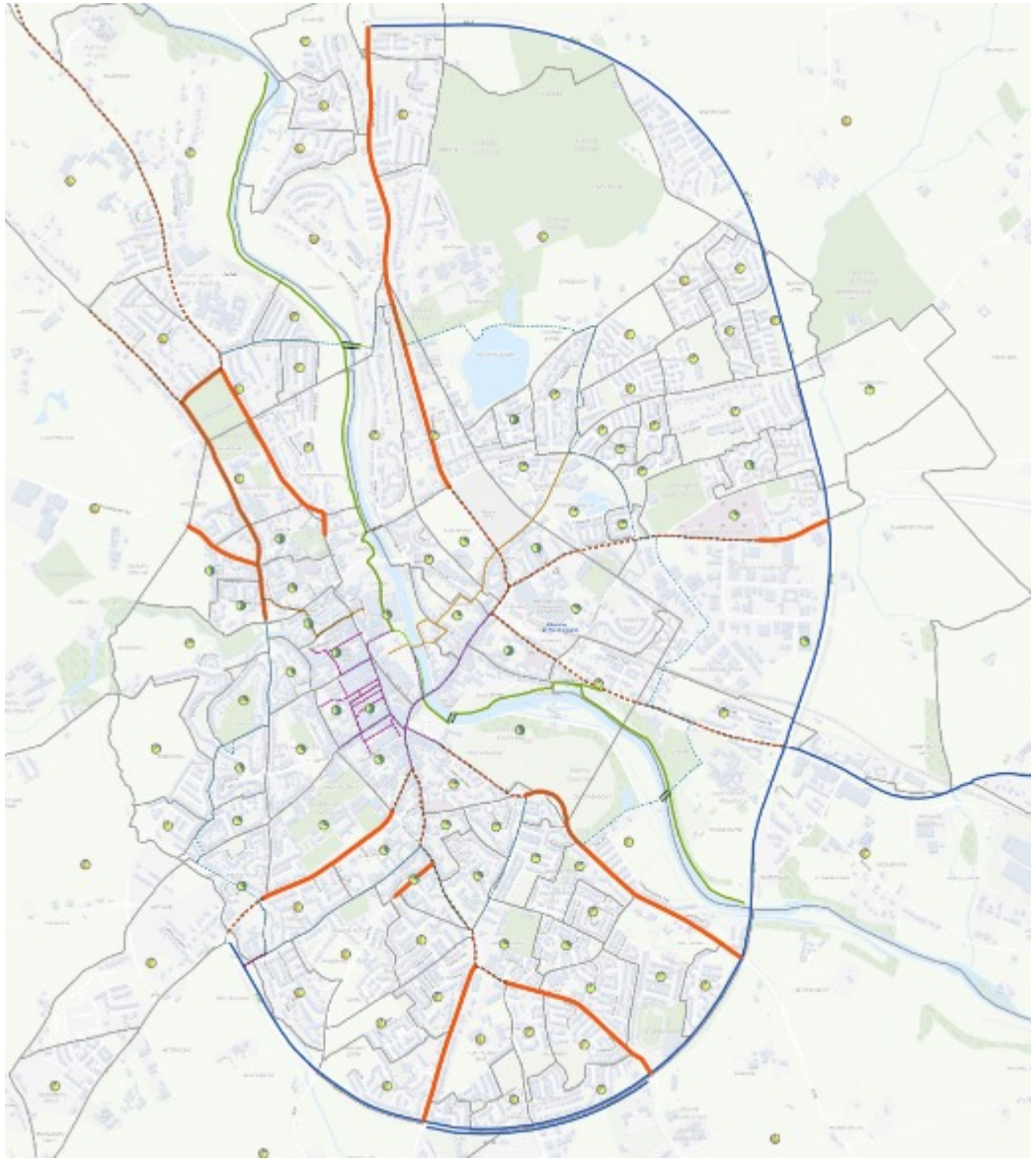
VELO-CITY2022
KOLESARI SPREMEMBO USTVARI


No Exit
P

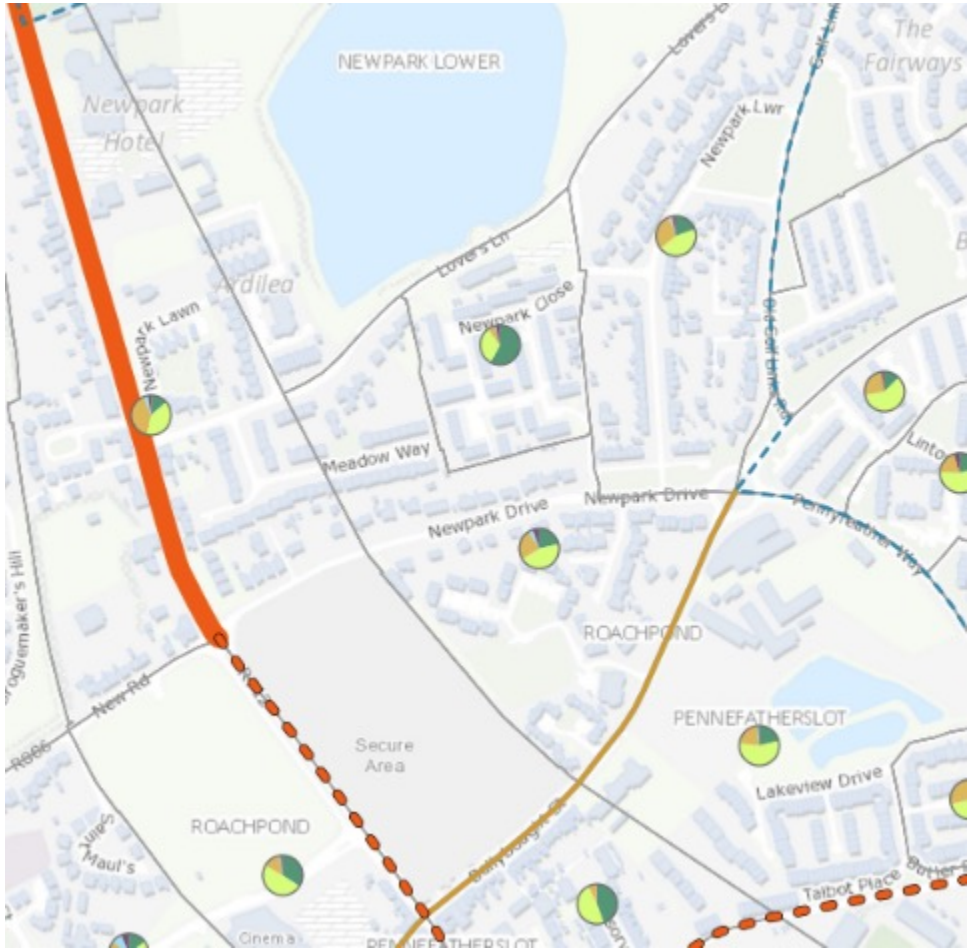
Theory of Change Model: Developing A Cycling Culture in Irish Towns							
	Objective	**Activities**	**Outputs**	**Mechanism of Change**	**Short/Medium Term Outcomes**	**Long Term Outcomes**	**Indicators**
	Design and build a strategic cycling network	Connect population densities, workplace densities, daytime populations and retail, health and recreational services	A network of cycle paths based on the five needs of cyclists; safety, coherence, directness, attractiveness and comfort	Facilitation of modal shift through provision of infrastructure	Greater modal share of cycling	Reduced car dependency, reduced emissions, greater levels of physical activity and well being	Kms of cycle paths built % of Junctions with Cyclist and Pedestrian Provision

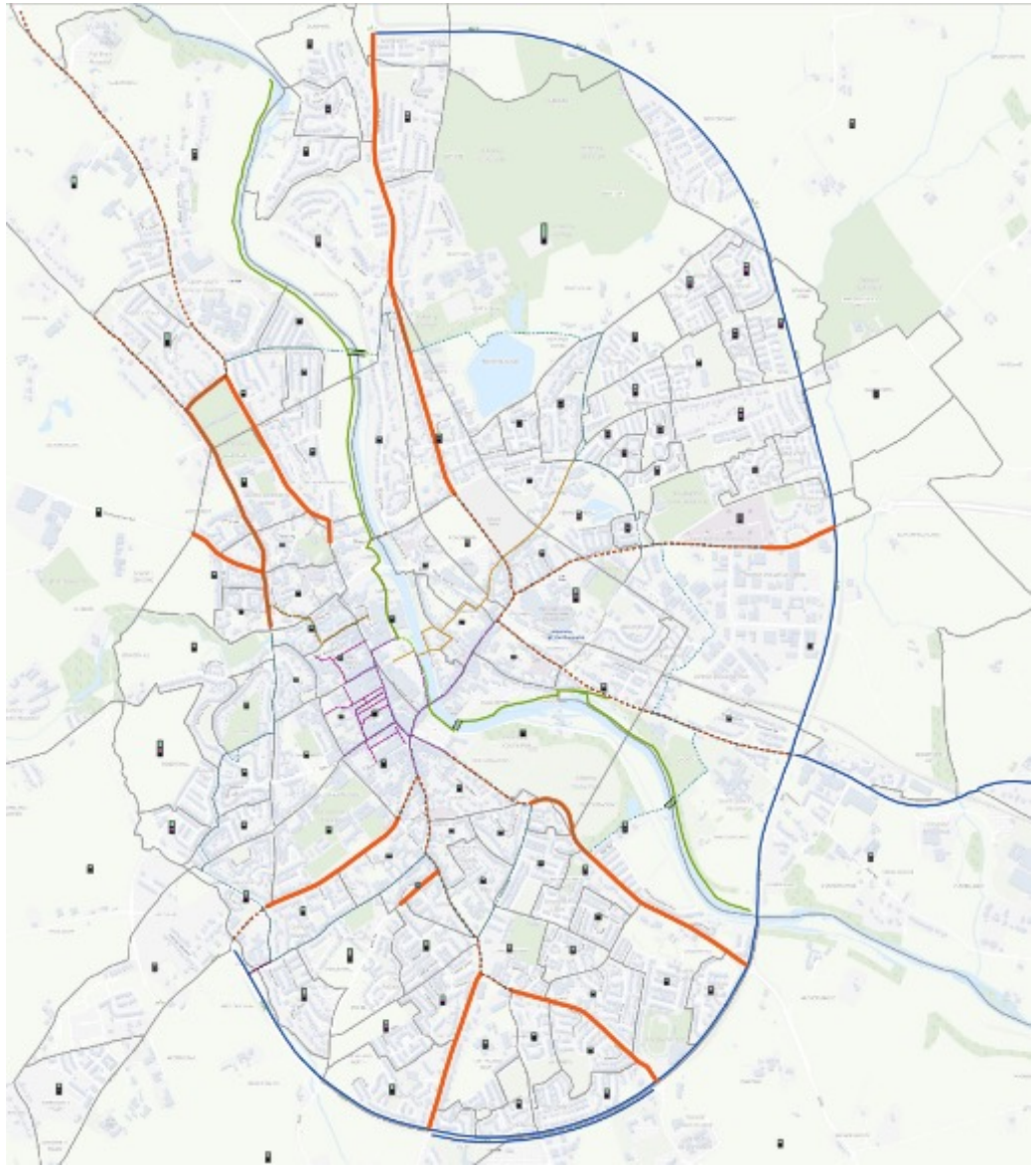

Consultation Process
Mobility Management Plan
City Engineers
Campaign Group
Strategic Cycle Network



No motor car

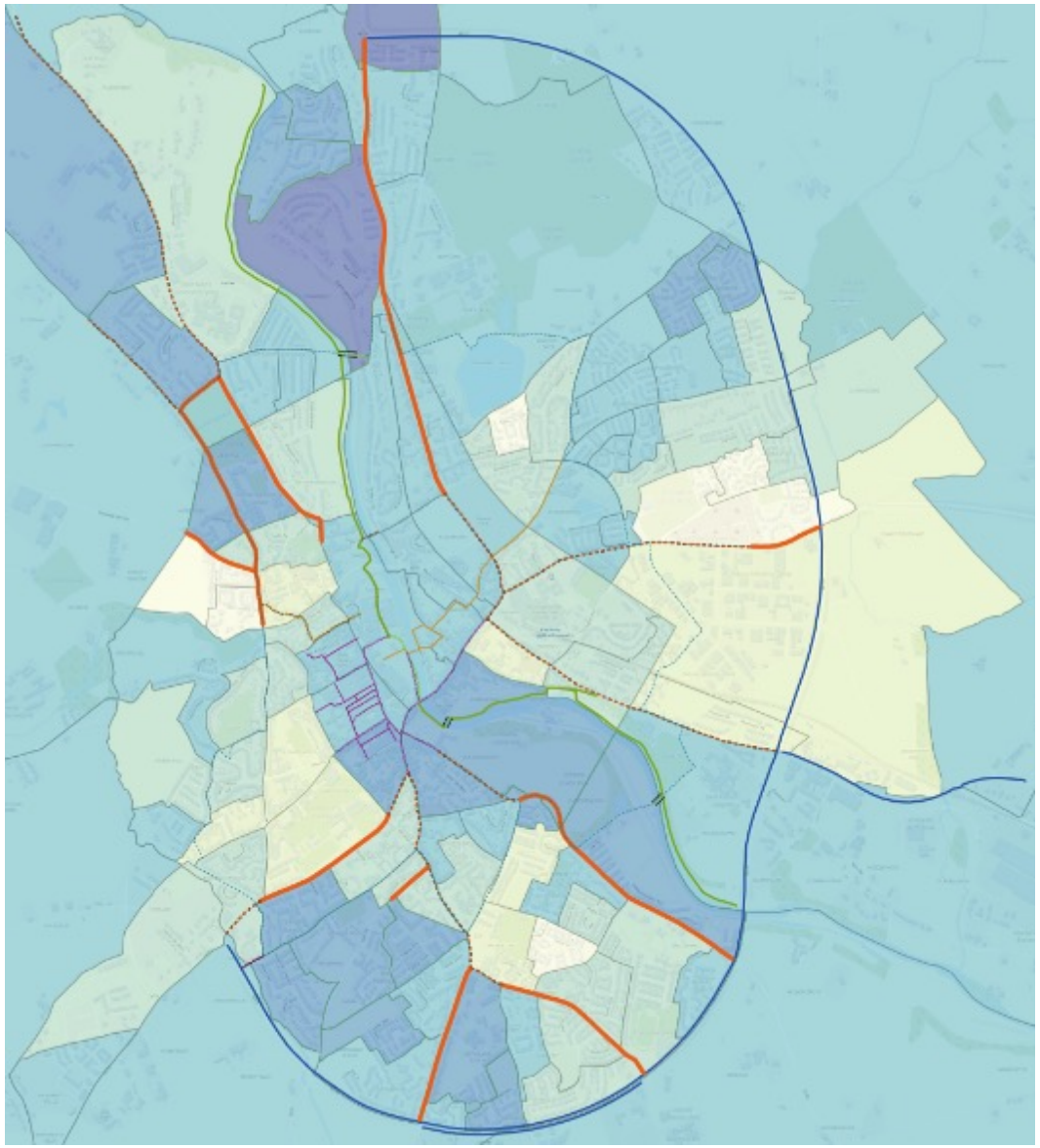
1 motor car





Under 15 mins

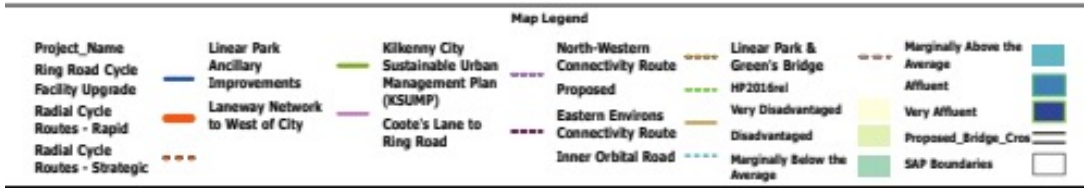




Pobal HP Deprivation Index:

Three dimensions of affluence/disadvantage are identified using 14 indicators:

Demographic Profile, Social Class Composition and Labour Market Situation.



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Beyond the big city: using a systems approach to cultivate a cycling culture in small cities and towns in Ireland

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Urban mobility and how people move in our towns and cities is garnering more attention, as solutions are sought to multiple challenges faced by residents; health and physical inactivity, climate change, air quality, urbanisation and accessibility. Traditional, siloed approaches limit impact and collaborative, systems approaches hold promise. However, systems approaches often remain theoretical and few practical applications of their added value have been demonstrated. This study illustrates how a systems approach can be used to underpin the development of a 9-step process to generate solutions for action on active mobility. The development of a systems map and a theory of change framework are key outputs of this 9-step process. The purpose of this paper is to describe how a systems map was developed in an Irish town utilising broad stakeholder engagement to map the variables that influence cycling in the town and to identify the leverage points for transformational interventions.

KEYWORDS

systems approach, cycling, active travel, participatory planning, collaborations and partnerships

Thank You!